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ENVIRONMENTAL PROTECTION AGENCY REGION II

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89 FEB 13 AM 11:51

HAZARDOUS WASTE FACILITIES BRANCH

NJJ 002 325 074

LENOX

INCORPORATED
100 LENOX DRIVE
LAWRENCEVILLE, NEW JERSEY 08648-2394

LOUIS A. FANTIN
FIRST ASSISTANT GENERAL COUNSEL
ASSISTANT SECRETARY

CA8G - February 6, 1989

Mr. Kenneth Siet, Bureau Chief
Bureau of G-W Pollution Abatement
Division of Water Resources
NJDEP
401 East State Street - 4th Floor CN-029
Trenton, New Jersey 08625-0029

Re: Lenox China Facility, Pomona, New Jersey

Dear Mr. Siet:

I want to express my appreciation on behalf of Lenox to you and your staff for meeting with us on January 25, 1989 to discuss the various Lenox projects. As a follow up to that meeting, I want to confirm the status of the two projects under the jurisdiction of the Bureau of Groundwater Pollution Abatement:

TCE Plume Project

As a result of an investigation conducted by Geraghty & Miller of the plume of trichloroethene (TCE) in ground water at the Lenox China facility in Pomona, New Jersey, we have determined that the most probable source of the TCE is an antecedent drum storage pad. This pad was located at the same place as the present TCE drum storage pad. Analyses of ground-water samples collected from temporary well points indicate that the plume emanates from the vicinity of the storage pad. Since the previous pad had an asphalt base of unknown permeability and no curbing, it is likely that TCE entered the environment after spills had occurred at the pad. This antecedent pad was used by Lenox until 1984 when it was replaced with the existing securely-constructed pad, which has a concrete base, concrete-lined sump, and curbs. No releases to soil or water have occurred from this new concrete facility.

Based on the above determination that the most probable source of the TCE was the antecedent TCE pad, it was our understanding that the remediation work of the TCE Plume will be performed under the exclusive jurisdiction of the New Jersey Department of Environmental Protection. I also want to confirm that Lenox will submit by March 15, 1989 a corrective action plan for the TCE plume as outlined in your letter of December 14, 1988 to Stephen F. Lichtenstein.

651253

Slip Basin

The Closure Plan for the slip basin together with supporting technical data submitted by Lenox is being reviewed by the Division of Water Resources. It is our understanding that Lenox does not have to submit a modification to its Closure Plan to address the RCRA cap issue until the State makes a determination on whether it will permit Lenox to close this unit in place.

Lenox thanks you for your assistance and would appreciate prompt confirmation of the regulatory status of the TCE plume remediation work and notification of the State's determination regarding Lenox's Closure Plan for the Slip Basin.

Very truly yours,

LENOX, INCORPORATED

Louis A. Fantin

LAF:ct
cc: B. Tornick, USEPA
R. Saar, Geraghty & Miller
R. Inyard, Eder
A. Gustray, Consultant
N. Kuehnast, Lenox
S. Piotrowski, Lenox

Let's protect our earth

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
CN 029
Trenton, N.J. 08625-0029

Eric J. Evenson
Acting Director

(609) 292-1637
Fax # (609) 984-7938

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Stephen F. Lichtenstein
Senior Vice President
Lenox Inc.
100 Lenox Drive
Lawrenceville, New Jersey 08648-2394

CN89-NOV 14 1989

Re: Progress Report 9 for Ground Water Investigations of Trichloroethylene (TCE) at Lenox China, Pomona, New Jersey. Prepared by Geraghty and Miller, Inc. dated September 18, 1989.

Dear Mr. Lichtenstein,

The Bureau of Ground Water Pollution Abatement (BGWPA) of the New Jersey Department of Environmental Protection received the above referenced progress report on September 21, 1989. Based on a review of this report, the BGWPA has provided the following comments.

1) Results of the TCE analyses for ground water samples taken at well borings B41 through B51 (downgradient of the Degreaser Sludge Pit) demonstrate elevated levels of TCE and indicate the existence of a plume. This plume appears to be separate from another TCE plume which was detected at the Lenox China facility near the TCE drum storage pad.

2) The ground water monitoring plan for TCE remediation and the ground water remediation design report submitted by Lenox only refers to the plume delineated in the area of the TCE drum storage pad. Existence of another plume would necessitate a similar corrective action response.

Stephen F. Lichtenstein

Lenox will be required to address and clarify this issue in the corrective action program for the entire facility.

If you have any question, please call Daryl Clark of my staff at (609) 292-8427.

Sincerely yours,

Tracy Wagner

Tracy Wagner, Section Chief
Bureau of Ground Water
Pollution Abatement

GWQM 378
RCRA (LD)

c: Barry Tornick, USEPA Region II
Irene Kropp, Chief, BGWPA

NJS 002 325 074 GF

ENVIRONMENTAL PROTECTION AGENCY
REGION II
89 NOV 24 AM 11:42
HAZARDOUS WASTE FACILITIES BRANCH

LENOX
INCORPORATED
100 LENOX DRIVE
LAWRENCEVILLE, NEW JERSEY 08648-2394

STEPHEN F. LICHTENSTEIN
SENIOR VICE PRESIDENT
SECRETARY & GENERAL COUNSEL

November 21, 1989

Ms. Tracy Wagner
Section Chief
Bureau of Ground Water
Pollution Abatement
New Jersey Department of
Environmental Protection
Division of Water Resources
CN 029
Trenton, New Jersey 08625-0029

Re: Progress Report 9 for Ground Water Investigations for Trichlorethelyne (TCE) at Lenox China, Pomona, New Jersey

Dear Ms. Wagner:

This will acknowledge your letter of November 14, 1989 concerning the above report. Lenox understands that the corrective action it has proposed must be modified to include remediation of what appears to be a second plume. Instructions have been given to our consultants to complete the delineation of this additional problem and to modify the proposed corrective action to the extent necessary to take the second plume into account.

Sincerely yours,

LENOX, INCORPORATED

Stephen F. Lichtenstein

Stephen F. Lichtenstein

SFL:ct
cc: R. Inyard
J. Kinkela
A. Gustray
B. Tornick, USEPA, Region II
I. Kropp, Chief, BGWPA

Let's protect our earth

Dang NJ 002 325 074

6F

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

CN 029
Trenton, N.J. 08625-0029

Office of
the Director

(609) 292-1637
Fax # (609) 984-7938

CAGI - FEB 14 1991

Mr. Stephen F. Lichtenstein
Lenox Inc.
100 Lenox Drive
Lawrenceville, NJ 08648

RE: Summary Report On TCE Investigation and Proposed Ground Water Remedial Design System for Lenox China

Dear Mr. Lichtenstein:

The Bureau of Ground Water Pollution Abatement (BGWPA) has received and reviewed the report entitled "Summary Report of the Investigation of TCE in Ground Water and Proposed Ground Water Remedial System, Lenox China Facility and Adjacent Areas", prepared by Geraghty and Miller, Inc. and the two reports by Eder and Associates entitled "Ground Water Remediation Design Report, Lenox China Facility" and "Technical Specifications, Ground Water Remediation System."

Upon review of the above mentioned reports and a telephone conversation with Kathy Gilroy of Geraghty and Miller, the BGWPA concludes that the reports and the recommended ground water remedial system and monitoring program are acceptable. However, Lenox must address the following comments and recommendations.

Geraghty and Miller Summary Report on TCE Investigation

Page 10, Last Paragraph
Permeability values or information should be incorporated into the report to support the claim that horizontal permeability of the Cohansey is greater than the vertical permeability.

Page 12, Paragraph 2
Following a conversation with the Geraghty and Miller representative, it is recommended that the report indicate that the TCE plume is concentrated at depths between 40 and 60 feet. The comment which implies that water shallower than 40 feet is clean should be omitted.

Page 13, Top of Page
Based on a conversation with the Geraghty and Miller representative, it is recommended that the sentence which states

that low or undetectable TCE levels were found in soils near the site of the former and present Degreaser Sump be omitted or be revised to state that the levels found in the soil do not indicate a continuous source.

Page 15, Paragraph 1
Sampling of side gradient wells should be performed to ensure that the width of the plume is also being captured. Well 13, located on the northwestern, side may be acceptable as a side gradient well. A side gradient well to the northeastern side of the plume needs to be located.

Page 15, Paragraph 3
The monitoring program will be performed on a quarterly basis during the first year of operation. Any request for changes in this monitoring schedule must be submitted to the Department until otherwise changed by the Department.

Appendix C, Page 3, Paragraph 3
While the summary report states that enhanced aquifer flushing and shortened cleanup times usually result from placing injected ground water upgradient of a plume, Geraghty and Miller recommends that the injected ground water be placed in downgradient areas of Lenox property to avoid any impact on the current waste management area's ground water monitoring system.

Discharges from the injection wells must be monitored through both effluent and ground water monitoring. If injection wells are placed downgradient of all existing monitoring wells, then additional monitoring wells will have to be installed to monitor the injection wells. A Department geologist will conduct a site visit to evaluate the potential locations for placement of the injection wells which would not significantly impact the current system, but would be upgradient of the recovery system.

Eder Associates Ground Water Remediation Design Report

Section 2.3 Carbon Adsorption Treatment, Page 5
The report states that effluent from the granular activated carbon treatment system should result in volatile organic concentrations of less than 1 ppb.

For a long term discharge of treated ground water from a site wide ground water corrective action program, the NJDEP would set effluent limits that are equivalent to ground water cleanup criteria, if the discharge is to uncontaminated areas of the aquifer and/or to areas where ground water flow would not be fully captured by a downgradient recovery system. This "open loop" system could potentially spread contamination to unaffected areas of the aquifer if clean up levels and effluent limits were not numerically equivalent. For a GW-2 aquifer, based on N.J.A.C. 7:14A-6.15(e) and N.J.A.C. 7:9-6.5(c), ground water cleanup criteria for the site would be equivalent to maximum contaminant levels (MCLs) and drinking water standards.

Based on your existing permit application, the Department would issue your draft permit with effluent limitations equivalent to MCL values. Procedures for requesting modifications to ground water quality based on effluent limitations are found in N.J.A.C. 7:9-6.9.

For a long term sitewide corrective action program, the NJDEP would establish effluent limitations at levels higher than the designated ground water cleanup criteria if the discharge of treated ground water back into the affected aquifer was fully captured by a downgradient ground water recovery system, thereby creating a "closed loop". If Lenox wishes to propose a closed loop system, they should modify their application and propose applicable effluent limitations.

It may be very difficult to prove that the ground water injection and recovery system represents the desired closed loop system. Ground water modeling may be useful, but it is essential that a sufficient number of piezometers/monitoring wells be adequately placed for ground water elevation measurements. In such a closed loop scenario, the injected water would be recaptured, retreated and reinjected until the ground water cleanup criteria is achieved. In a closed loop system, ground water recovery rates may have to change over time in order to maintain an adequate capture zone. This would be due to the impact an upgradient discharge would have on the hydraulic gradients and flow directions at the site.

Please note that the effluent limits that will be set in the permit will be subject to enforcement actions under the Water Pollution Control Act and the Clean Water Enforcement Act, if violated. The discharge flow rate, ground water cleanup criteria and protection standards established in the permit will not be considered effluent limitations.

If you have any questions regarding the comments of this letter, please contact Daryl Clark of my staff at (609) 292-8427.

Sincerely,

Irene Kropp, Chief
Bureau of Ground Water
Pollution Abatement

GWQM378
RCRA(LD)

cc: Kathy Gilroy, Geraghty and Miller, Inc.
Rick Inyard, Eder Associates
Central File

NJ 002 325 074 D. Clark

6F

LENOX

STEPHEN F. LICHTENSTEIN
SENIOR VICE PRESIDENT
SECRETARY AND
GENERAL COUNSEL

CA91- June 24, 1991

RECEIVED

JUN 25 1991

Dept. of Environmental Protection
Division of Water Resources
Ground Water Quality Control

VIA HAND DELIVERY

Ms. Irene Kropp
Department of Environmental Protection
Division of Water Resources
Bureau of Ground Water
Pollution Abatement
CN 029
401 E. State Street
Trenton, New Jersey 08625

Re: Lenox China Pomona Facility - TCE Remediation Plan ("Plan") - Approval for Pilot Test

Dear Ms. Kropp:

This will confirm my telephone conversation with Tracy Wagner of your bureau last week. The purpose of this letter is to request an emergency permit or approval for a pilot test to determine the feasibility of recharging the groundwater being treated under the Plan upgradient of the recovery wells in a "closed loop" system and to determine the final design parameters for the treatment system. It is important to run the pilot test as quickly as possible, and we are planning to start during the week of July 8, 1991.

The pilot test will pump groundwater from existing Recovery Well RW1 through a Calgon Carbon Treatment Unit. The estimated TCE contamination at RW1 is 250 ppb and the treatment unit will provide TCE removal to less than 1 ppb. The treated water will be recharged to a 100 foot long pilot recharge trench - a copy of the design of the trench is attached to this letter. The trench will be located on Lenox property in front of its Pomona plant.

Groundwater for the pilot test will be pumped at a rate of less than 100,000 gallons per day for an initial plan period of 5 to 7 days in order to obtain the necessary hydrologic and analytic data needed for the design of a full-scale recharge system. Although we hope to pump only for 7 days, we would like the option of running the pilot test for a maximum of 2 weeks.

The pilot test will be run by Lenox personnel and Eder Associates consulting engineers.

Please let me know if there is any additional information you need, or you may call Gary Rozmus at Eder directly at (516) 671-8440. Lenox would truly appreciate the issuance of the emergency permit or approval by Wednesday of this week. Two additional copies of this letter are enclosed for your convenience.

Sincerely yours,

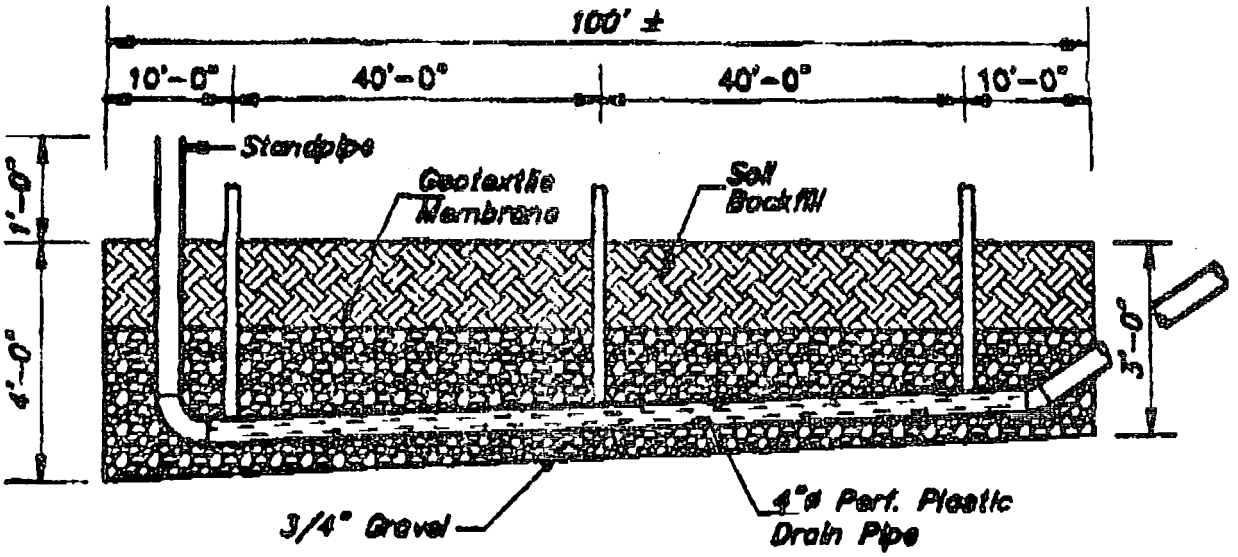
LENOX, INCORPORATED

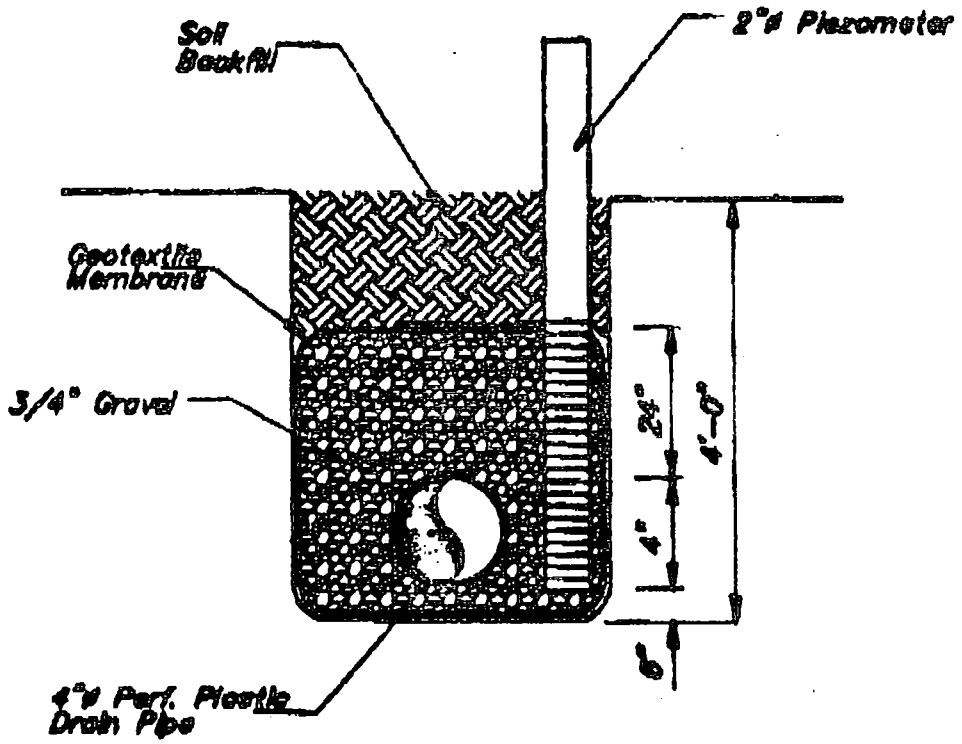
Stephen F. Lichtenstein

SFL:ct
cc: G. Rozmus
G. Berman
J. Kinkela

LENOX INCORPORATED, 100 LENOX DRIVE, LAWRENCEVILLE, NJ 08648 TEL. 609-896-2800 FAX 609-895-0139

oder associates consulting engineers, p.c.





PILOT RECHARGE TRENCH

LENOX CHINA
POMONA, NEW JERSEY

SK530-3M

SCALE: NONE

NJ5 002 325 074 6F

Let's protect our earth

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

CN 029
Trenton, N.J. 08625-0029

(609) 292-1637
Fax # (609) 984-7938

Office of
the Director

JUN 26 1991

Mr. Stephen F. Lichtenstein
Lenox Incorporated
100 Lenox Drive
Lawrenceville, New Jersey 08648

Re: Proposed Pilot Test at the Lenox China Facility
Pomona, Atlantic County
NJPDES No. NJ0070343

Dear Mr. Lichtenstein:

The New Jersey Department of Environmental Protection (Department) hereby allows Lenox Incorporated to conduct the proposed pilot test as requested in your letter of 24 June 1991. This letter authorizes the activities to be conducted at the Lenox China facility in Pomona, Atlantic County.

The pilot test will pump ground water from existing recovery well RW1 through a Calgon carbon treatment unit. The estimated trichloroethylene (TCE) concentration at RW1 is 250 parts per billion (ppb) and the treatment unit will provide TCE removal to less than 1 ppb. The treated water will be recharged to a 100 foot long pilot recharge trench. The trench will be located onsite, upgradient of the contaminant plume.

Ground water for the pilot test will be pumped at a rate of less than 100,000 gallons per day for an initial period of 5-7 days. The pilot test may be run for a maximum of two weeks. The data obtained will be used to design a full scale recharge system.

The Department is granting approval for the pilot test in accordance with N.J.A.C. 7:14A-2.1(i), so that the hydrogeologic information necessary to design a ground water remediation system may be obtained. It is anticipated that a New Jersey Pollutant Discharge Elimination System (NJPDES)/Discharge to Ground Water (DGW) permit will be issued in the future for the implementation and monitoring of the ground water remediation system, as required by NJPDES and RCRA regulations.

If you have any questions concerning the above, please contact the case geologist, Daryl Clark, at (609)292-8427.

Sincerely,

Arnold Schiffman, Assistant Director
Ground Water Quality Management Element

GWQM378

c: Daryl Clark, BGWPA

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State of New Jersey
Department of Environmental Protection and Energy
Division of Publicly Funded Site Remediation
CN 413
Trenton, NJ 08625-0413
Tel. # 609-984-2902
Fax. # 609-633-2360

Scott A. Weiner
Commissioner

Anthony J. Farro
Director

Mr. Stephen F. Lichtenstein
Lenox Incorporated
100 Lenox Drive
Lawrenceville, NJ 08648

JUN 29 1992

Re: Investigation of Trichloroethylene in Ground Water and Proposed Remedial System, Lenox China Facility, Pomona, Atlantic County

Dear Mr. Lichtenstein:

The Bureau of Ground Water Pollution Abatement (BGWPA) has received your letter dated May 13, 1992 concerning the TCE ground water monitoring program and the report entitled "Supplemental Ground Water Sampling, Analysis and Monitoring Plan, TCE Remediation System (May 1992)" prepared by Eder Associates.

Upon review of these documents, the BGWPA has provided the following comments and requirements.

Comments on the May 13, 1992 letter:

1) Lenox must submit a more detailed map showing the proposed well locations and their positions relative to the present TCE monitoring system and residential wells.

2) Page 2 and Attachment 1 of the letter state that the proposed wells would be installed at a depth of approximately 60 to 70 feet. During installation of any new proposed wells along the Whitehorse Pike, the borings should first be advanced to the confining layer to verify its existence. Enclosed with this letter are NJDEPE monitoring well specifications for unconsolidated formations.

Comments on Supplemental Sampling and Analysis Plan:

1) Table 3 of the supplemental plan recommends the preservation of volatile organic samples with HCL and a holding time of 14

days. Although this method is approved in the NJDEPE Field Procedures Manual (1992), in order to ensure consistency of results between current and future monitoring for all onsite and offsite wells, the sample preservation and holding times specified in Lenox China's approved "Ground Water Sampling and Analysis Plan" (November 1990) must be adhered to. This plan specifies no preservatives for volatile organic samples and has a holding time of 7 days. If Lenox submits data which demonstrates, to the satisfaction of the BGWPA, that the proposed preservation method will not significantly affect sampling results, the new method will be accepted.

2) Table 4 contains a list of wells that are to be used to monitor the TCE remediation system. The status of wells B-50 and B-55 is unclear since they are not included in the table for either annual or quarterly monitoring. It is recommended that B-55 be sampled on a quarterly basis to monitor the width of the degreaser sump TCE plume in the area between Aloe Street and Atlantic Avenue.

If you have any questions regarding this memo, please contact Daryl Clark of my staff at (609) 292-8427.

Sincerely

Tracy Wagner for Irene Kropp

Irene Kropp, Chief
Bureau of Ground Water
Pollution Abatement

Enclosures w/o enclosures
GWQM378 01/08/99 - KOH

6F

LENOX

STEPHEN F. LICHTENSTEIN
SENIOR VICE PRESIDENT
SECRETARY AND
GENERAL COUNSEL

August 11, 1992

Irene Kropp, Chief
Bureau of Groundwater Pollution Abatement
New Jersey Department of Environmental
Protection and Energy
CN 413
Trenton, New Jersey 08625-2360

Re: Investigation of Trichloroethene in Groundwater and Proposed Remedial System, Lenox China Facility and Adjacent Area, Pomona, New Jersey

Dear Ms. Kropp:

This letter responds to your June 29, 1992 letter about the proposed groundwater monitoring program at the Lenox China facility in Pomona, New Jersey. I apologize for the delay in sending this to you. It was ready to go in early July but inadvertently was mislaid.

With respect to our May 13, 1992 letter, we have enclosed a more detailed map that depicts the proposed well locations along Whitehorse Pike (3 copies). The new wells will be installed in accordance with NJDEPE's Monitor Well Specifications for Unconsolidated Formations. The wells will be installed immediately above the clay confining layer, which is expected to be approximately 60 to 70 feet below grade, based on available field data. During well installation, split spoon soil samples will be collected at five-foot intervals from each well boring to verify the depth of the confining layer.

With respect to our Supplemental Sampling and Analysis Plan, we have revised the sample preservation and holding time data for volatile organic samples (Table 3) so it is consistent with the November 1990 Ground Water Sampling and Analysis Plan. In addition, Table 1 has been revised to include wells B-50 and B-55 in the annual and quarterly groundwater monitoring program, respectively. 50 45

Three copies of the revised Supplemental Sampling and Analysis Plan are enclosed to reflect these changes. Please call if you have any questions.

Very truly yours,

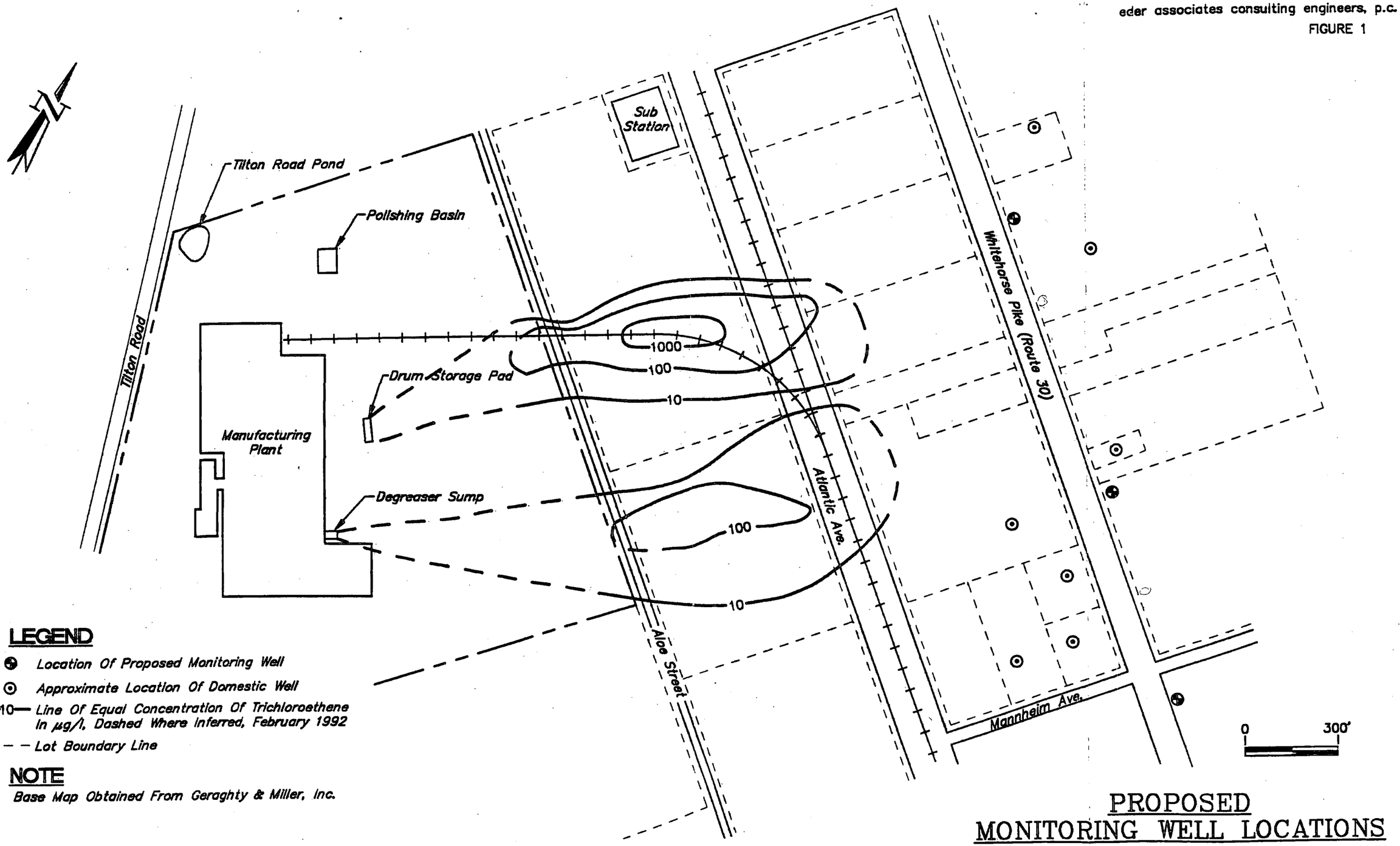
LENOX, INCORPORATED

Stephen F. Lichtenstein

SFL:ct
Enclosures
cc: J. Kinkela (w/o enclosures)
G. Berman (w/o enclosures)
F. Inyard (w/o enclosures)

eder associates consulting engineers, p.c.

FIGURE 1



LEGEND

- Location Of Proposed Monitoring Well
- Approximate Location Of Domestic Well
- —10— Line Of Equal Concentration Of Trichloroethene In µg/l, Dashed Where Inferred, February 1992
- – – – Lot Boundary Line

NOTE

Base Map Obtained From Geraghty & Miller, Inc.

PROPOSED MONITORING WELL LOCATIONS

LENOX CHINA FACILITY & ADJACENT AREA

POMONA, NEW JERSEY

SK5303AC
070992

NJ 002 325 074 6F

State of New Jersey
Department of Environmental Protection and Energy
Division of Publicly Funded Site Remediation
CN 413
Trenton, NJ 08625-0413
Tel. # 609-984-2902
Fax. # 609-633-2360

Scott A. Weiner
Commissioner

Anthony J. Farro
Director

CAG2 - SEP 2 1 1992

Refer to 12/16/92 letter

Mr. Stephen F. Lichtenstein
Lenox Inc.
100 Lenox Drive
Lawrenceville, NJ 08648

Re: Investigation of Trichloroethylene in Ground Water and Proposed Remedial System, Lenox China Facility, Pomona, Atlantic County

Dear Mr. Lichtenstein:

The Bureau of Ground Water Pollution Abatement (BGWPA) has received your letter, dated August 11, 1992 and the revised "Ground Water Sampling and Analysis and Monitoring Plan, TCE Remediation System (July 1992)", prepared by Eder Associates. A review completed by the BGWPA shows that the comments in our June 29, 1992 letter to you have been satisfactorily addressed and/or incorporated into the above referenced documents.

In regard to the proposed offsite ground water monitoring wells, the locations for the three wells are acceptable. The BGWPA also requires that two additional monitoring wells be installed along the northern side of Whitehorse Pike (Route 30) between the originally proposed wells (See map enclosure). The installation of the additional wells will provide better coverage of the area along Whitehorse Pike and will diminish the chances that contaminants will migrate between the wells undetected.

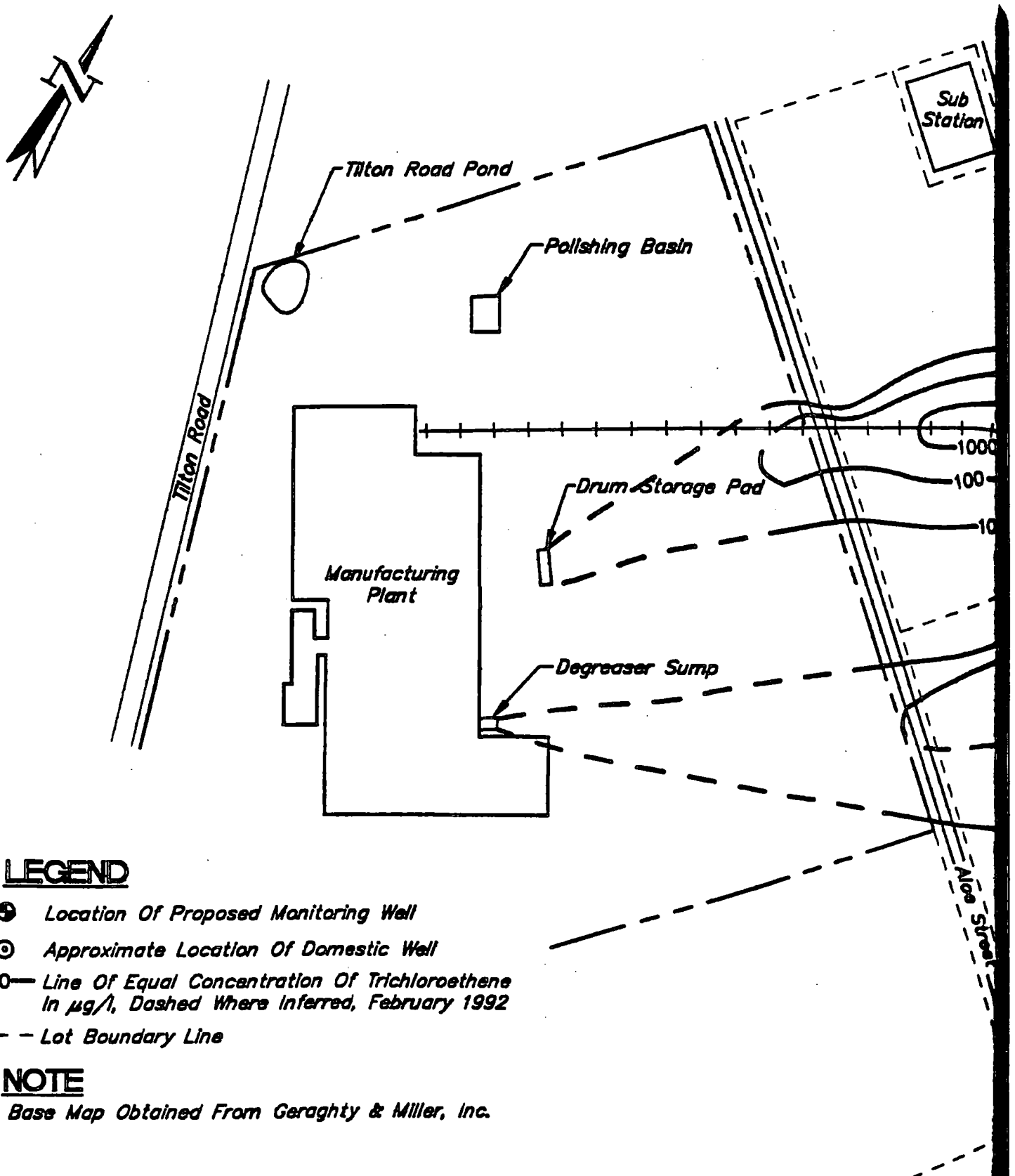
As part of the offsite monitoring program, Lenox must also attempt to obtain access to those domestic wells identified on the map that are located on the north side of Whitehorse Pike. These domestic wells will have to be monitored for the contaminants of concern.

If you have any questions regarding the contents of this letter, please contact Daryl Clark of my staff at (609) 292-8427.

Sincerely,

Irene Kropp, Chief
Bureau of Ground Water
Pollution Abatement

Enclosure
GWQM378



LEGEND

- Location Of Proposed Monitoring Well
- Approximate Location Of Domestic Well
- —10— Line Of Equal Concentration Of Trichloroethene In µg/l, Dashed Where Inferred, February 1992
- – – – Lot Boundary Line

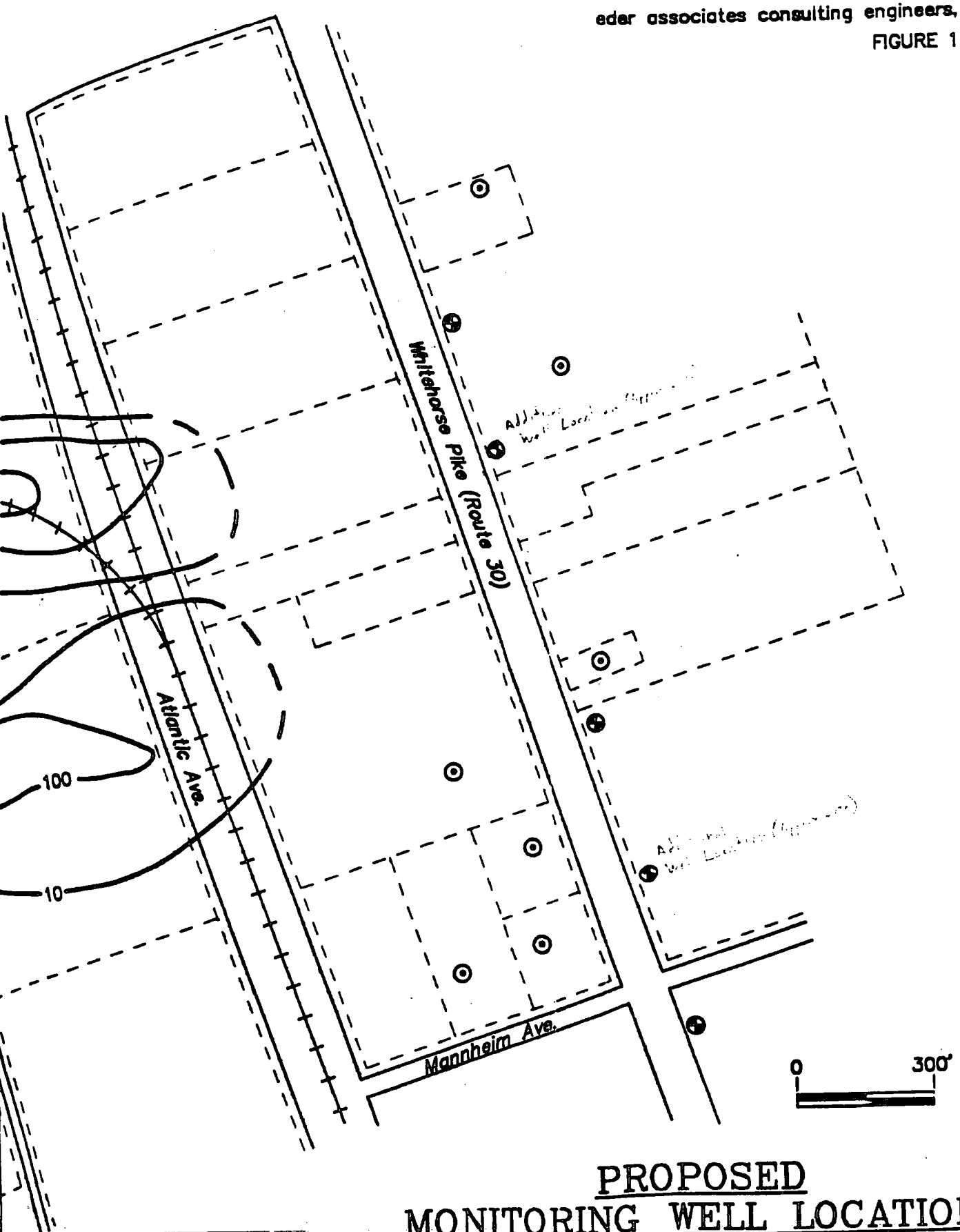
NOTE

Base Map Obtained From Geraghty & Miller, Inc.

SK5303AC
070992

eder associates consulting engineers, p.c.

FIGURE 1



PROPOSED
MONITORING WELL LOCATIONS

LENOX CHINA FACILITY & ADJACENT AREA

POMONA, NEW JERSEY

1 NJ 002 325 074 6F

LENOX

STEPHEN F. LICHTENSTEIN
SENIOR VICE PRESIDENT
SECRETARY AND
GENERAL COUNSEL

1992 - October 9, 1992

Refer to 12/16/92 letter

HAND DELIVERED

Irene Kropp, Chief
Bureau of Groundwater Pollution Abatement
New Jersey Department of Environmental
Protection and Energy
CN 413
Trenton, New Jersey 08625-2360

Re: Investigation of Trichlorethylene in Groundwater and Proposed Remedial System, Lenox China Facility and Adjacent Area, Pomona, New Jersey

Dear Ms. Kropp:

This letter is in response to your letter to me dated September 21, 1992. Your letter raised two questions: one concerning your requirement of two additional groundwater monitoring wells and the other concerning the monitoring of domestic wells located on the north side of Whitehorse Pike.

With regard to the seven domestic wells shown on the Plan accompanying my August 11, 1992 letter, these wells are being monitored and Lenox has installed GAC filtering units. Two of the wells in previous sampling had reflected the presence of TCE and are being monitored monthly; the remaining five wells are being monitored quarterly. The results of the sampling are being sent to Daryl Clark of your Bureau.

Lenox is concerned about your requirement that two additional monitoring wells be installed along the northern side of Whitehorse Pike in the approximate locations that you had indicated. I respectfully request that you reconsider this requirement.

In my August 11th letter to you, Lenox had proposed installing three monitoring wells along the Whitehorse Pike east of the downgradient edge of the trichlorethylene (TCE) groundwater plume. The purpose of your request for the two additional wells was to diminish the chance that contaminants will migrate between the three wells undetected. We sincerely do

not believe that can happen. Lenox believes that the initial three-well proposal is a sound one and allows Lenox the flexibility to modify well locations based on actual field data.

The most recent groundwater monitoring data (May 1992) indicates that the plume is about 600 feet west of the east side of the Whitehorse Pike (Route 30) and at its widest point, the plume is approximately 1,000 feet wide. The three proposed monitoring wells will be spread over an approximate distance of 1,700 feet and the distance between wells will be 950 feet and 750 feet going from northeast to southeast.

The monitoring well spread is sufficient to encompass the plume width if it were to reach the Whitehorse Pike based on the accumulated data on the TCE plume. The plume width of 1,000 feet would tend to increase slightly to 1,200 or 1,500 feet maximum due to hydrodynamic dispersion in the aquifer as it moves downgradient. It is not possible for the plume to decrease in width if it were allowed to move downgradient by reason of this same aquifer property, dispersivity. Therefore, we believe that the proposed monitoring well spread leaves an ample margin of safety to encompass the plume width. Hydrogeologically, it is not physically possible for the plume to move between monitoring wells undetected since the wells are closer together than the maximum plume width upgradient of the proposed wells. Considering dispersivity, the increased plume width is inevitable under the hypothetical scenario of the plume reaching Route 30; therefore, the well spacing also provides an ample safety margin.

A hollow-stem auger with a screened lead auger will be used to drill each well boring, and water samples taken at 10-foot intervals to the depth of the clay layer will be analyzed with a portable gas chromatograph. If no TCE is present, the three proposed wells will be screened at depths corresponding to those where the plume has been found to occur on Lenox property (60' - 65'). If TCE is found at depths which clearly indicate that it is not from Lenox, this will be noted, but will not be a factor in establishing placement of the well screen. If TCE is discovered at a depth expected from the Lenox plume, at that time Lenox would discuss with the NJDEPE whether the monitoring well program should be modified.

We feel we should not have to incur the substantial expense of the two additional wells you requested because we do not believe they will add to the ability of our three proposed wells to intercept the plume. Further, if additional monitoring wells are needed, their required locations may be substantially different from the locations proposed by your Bureau.

Lenox requests your permission to proceed with the three monitoring wells as originally proposed.

Sincerely,

LENOX, INCORPORATED

Stephen F. Lichtenstein

SFL:ct
cc: J. Kinkela
G. Berman
F. Inyard

NJ 002 325 074 6F

LENOX

CA93 — May 27, 1993

Mr. Frank Faranca
NJDEPE
Bureau of Federal Case Management
CN-028
Trenton, New Jersey 08625

Re: Lenox China, NJPDES-DGW Permit # 0070343,
Voluntary TCE Plume Monitoring

Dear Mr. Faranca:

This letter confirms our May 5, 1993 telephone conversation and your May 10 telephone conversation with Jim Barish of Eder Association regarding the level of laboratory data required for sample analysis under the Supplementary Groundwater Sampling and Analysis Plan (SGWSAP). In particular, this is a voluntary sampling program which provides engineering data for monitoring and controlling remediation system operation. Therefore, it is agreed that samples will be analyzed by a New Jersey certified laboratory using EPA method 502.2 or 524. No CLP procedures exist for this method and Lenox will not be required to obtain or submit QA/QC data beyond that which is normally maintained by the laboratory for this method.

It was further agreed that the first round of sampling, May 1993, for the five (5) monitoring wells installed along the White Horse Pike in April 1993, will be conducted using USEPA Method 524. Lenox will assure that appropriate QA/QC data (NJDEPE full deliverables package) is available for the first round. The sampling results from the first round will be assessed to determine if there is any need to attain the same level of QA/QC for the second and subsequent rounds.

If you have any questions or comments concerning this matter please contact me at (609) 484-9798.

Sincerely,

John F. Kinkela
Director of Environmental Engineering

sm

c S. Lichtenstein
G. Berman/F. Inyard, Eder
A. Park, EPA